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ABSTRACT

The Performance Funding Project of the State of Tennessee is discussed. The Project was instituted to explore the question of whether it is desirable and possible to allocate some portion of state funds to community colleges and universities on a performance effectiveness criterion rather than the current credit hour and enrollment criteria. Major funds would continue to be allocated on an enrollment basis. The purposes of the Project are as follows: (1) to explore ways in which the state appropriations and funding processes might promote improvements in instructional effectiveness; and (2) to examine ways in which the state appropriations and funding processes might promote institutional diversity and reinforce the unique strengths of each campus. Implementation of the Project involves the following processes: identification of statewide goals, development of institutional goals and objectives, design of institutional performance indicators, acquisition of data on performance, and selection of formula funding policies. A three-phase implementation plan that spans a three-year period is described. It is suggested that careful and prudent application of this model should insure the fundamental goals of higher education: the conservation, advancement, and application of knowledge, and the growth of students. A discussion of policy intent and impact in light of the characteristics of this funding model are included. (SF)

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MEASURING INSTITUTIONAL PERFORMANCE AT THE STATE LEVEL

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MEASURING INSTITUTIONAL PERFORMANCE AT THE STATE LEVEL

This is a porcupine theme, one with prickly potential for controversy. No matter where one encounters the idea of measuring performance in higher education, and especially in measuring institutional performance at the state level, there is high probability of conceptual injury. So much has been said and written about measurement, evaluation, and accountability in higher education my concern is whether I might share anything really fresh.

As best I can discern, much of what can be found in the literature distills to these two notions: (1) that it would be good, essential, imperative (choose one) if the higher education community could get a better handle on effectiveness--not only at the state and institutional levels--but at every level; but (2) that it is difficult, impossible, inappropriate (choose one) to do so. Considering the complexity of higher education measurement and evaluation issues, the frequency of polarized perspectives, and the number of able minds that have already dealt with this theme, one might well pause before jumping into such a conceptual briarpatch.

However, Tennessee is known as the Volunteer State and has had a history of maverick personalities and actions since the time of Andrew Jackson. I suppose, therefore, it would not be entirely out of character to report that the higher education community of the state has stuck its toe into the measurement water and is now preparing for complete immersion into a project of fascinating proportion.

What I would now like to do is to outline what we're up to, why, and how; and then you can keep an eye on us to further judge the wisdom of this particular volunteer action. First, however, I need to turn the title of this session around a bit so that it reads "Measuring State Performance at the Institutional Level." This inversion not only describes a philosophical inclination of mine but reflects more clearly the intent of the effort in Tennessee, which we call the Performance Funding Project.

PURPOSE OF THE PERFORMANCE FUNDING PROJECT

Similar to many other states over the nation, Tennessee makes use of an appropriations formula to build its budgetary request for presentation to the Governor and legislature and to establish a rationale for allocation of whatever funds are finally made available. Essentially, the Tennessee formula derives major cost projections from a consideration of a credit hour matrix and corresponding unit cost matrix by level and field of study. Formula guidelines are also provided for certain other areas such as general administration, maintenance and operation of physical plant, and libraries.

Objectivity, equity, simplicity--these are strengths frequently imputed to the current appropriations formula utilized in Tennessee higher education. Equivalent support for equivalent programs is the maxim widely understood as expressing the rationale on which the formula is built. Thus, the formula not only recognizes the number of students enrolled but the mix of educational programs by type and level, the pattern of programs that mark the educational character of each institution from community college to research university.

Though an improvement upon earlier allocation models that relied heavily on analysis of "per student" appropriations, the formula is not without easily recognized imperfections. Prominent among the criticisms of the formula is the one indicating that the formula says nothing about educational "quality." The formula is also accused of having a homogenizing effect, of averaging out institutional diversity. Whether the formula might have practical utility in times of enrollment stablization or decline is also a matter much debated. These are familiar criticisms, easily found in current literature and in no way peculiar to Tennessee.

I would like to note here that the silence is often impressive when formula critics are asked to provide some creative replacement for that which they propose to discard. The point is that budgets are built and funds allocated every year in every state. Thus, the question is not whether there will be some appropriations/allocation model but what model offers the greatest philosophical, practical, and political advantage.

Fundamentally the Performance Funding Project was conceived as a venture in the improvement of the formula and appropriations process. The purpose of the project is to explore the question of whether it might be desirable and possible to allocate some portion of state funds to community colleges and universities on a performance effectiveness criterion (how good) as compared to the current credit hour and enrollment criteria (how much).

I want to emphasize the appearance of that little word "some." To completely revise the current appropriations formula, which has important strengths previously cited, is not the purpose of the project. Thus, the project anticipates that major funds would still be

allocated on the basis of enrollments by program field and level. However, the project is designed to explore the merit of building a complementary feature into the formula, a feature in which some portion of funds might be allocated on a performance basis rather than an enrollment basis.

The purposes of the Performance Funding Project are more explicitly stated as follows:

(1) To explore ways in which the state appropriations and funding processes might promote improvements in instructional effectiveness.

(2) To examine ways in which the state appropriations and funding processes might promote institutional diversity and reinforce the unique strengths of each campus.

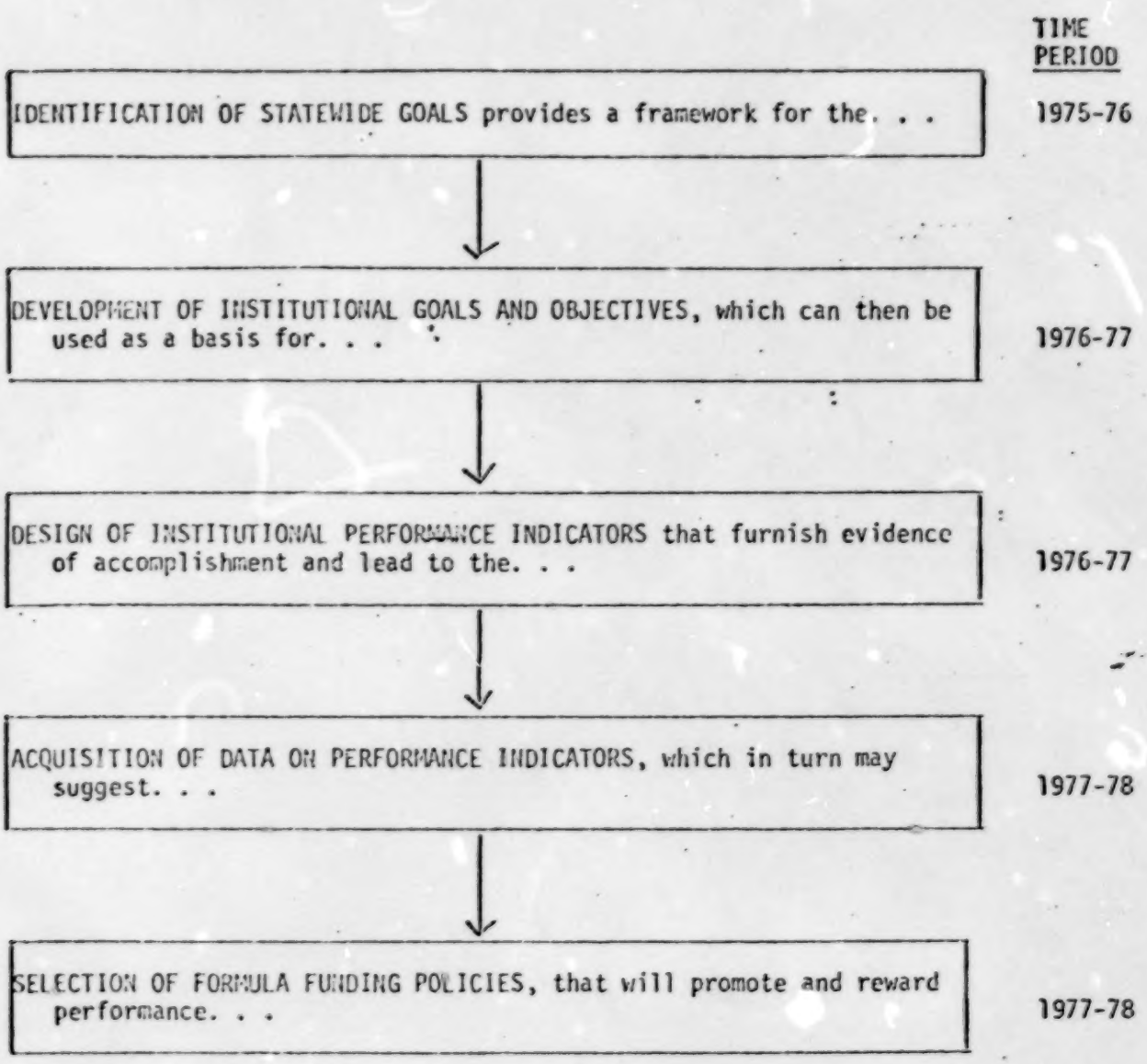
AN APPROACH TO PROJECT DEVELOPMENT

What processes and involvements are planned for achievement of these goals? A brief exploration of these may further explain the major aspirations of the Performance Funding Project. The model of Figure 1 anticipates project procedures in broad outline.

First in importance is the identification of statewide goals that might provide a framework for the development of institutional goals and objectives. These institutional goals would then furnish a basis for the design of institutional performance indicators that provide evidence of accomplishment and lead to the acquisition of data on performance. This experience base might then lead to the selection of formula funding policies that would promote and reward performance.

These activities of the project are organized in three major phases--with purposes, activities, and outcomes as follows.

FIGURE 1. A MODEL FOR THE PERFORMANCE FUNDING PROJECT


TIME PERIOD
IDENTIFICATION OF STATEWIDE GOALS provides a framework for the. . .
1975-76
DEVELOPMENT OF INSTITUTIONAL GOALS AND OBJECTIVES, which can then be used as a basis for. . .
1976-77
DESIGN OF INSTITUTIONAL PERFORMANCE INDICATORS that furnish evidence of accomplishment and lead to the. . .
1976-77
ACQUISITION OF DATA ON PERFORMANCE INDICATORS, which in turn may suggest. . .
1977-78
SELECTION OF FORMULA FUNDING POLICIES, that will promote and reward performance. . .
1977-78

Phase I - Planning Phase - 1974-76. The purpose of this planning phase is to involve both national and state personnel in clarifying the conceptual bases of the project, to identify related efforts under way around the country, to outline procedures for execution of the project, and to obtain support necessary for pilot projects described in Phase II. The outputs of this planning phase will include three documents to be used by institutional personnel in the development and execution of pilot projects. These include a (1) Status Report and Plan of Action, (2) Guidelines for Development and Submission of Pilot Projects, and (3) A Guide to Major Resources on Educational Evaluation.

Phase II - Pilot Projects - 1976-77. The purpose of this second phase is to provide institutions an opportunity to more clearly identify some of their major goals and to develop performance indicators that might provide evidence on goal achievement. These pilot projects also furnish a means for calling on the imagination, initiative, and intelligence of institutional faculties and staffs. Institutions will be invited to submit pilot proposals and to identify a pilot project director. Each institution submitting a satisfactory pilot proposal would be provided with budgetary support for the pilot effort. A series of seminars and conferences will be held for project directors, and other interested faculty and staff. The outcome of this phase would be the identification of performance indicators at each institution, the development of plans for acquiring data on these indicators, and possible suggestions for rewarding performance by means of the appropriations formula.

Phase III - Pilot Simulation - 1977-78. The purposes of this final phase are to acquire data on the institutional performance

indicators identified in Phase II, to simulate the effect of allocating some portion of funds on the basis of these indicators, and to move the more promising funding mechanisms into the mainstream of the appropriations formula for the next appropriations cycle. Activities would include the acquisition of performance data on institutional indicators, the simulation of performance funding, and the development of formula revision policies that would move some indicators into the formula.

LINKING RESOURCES AND RESULTS--SOME ASSUMPTIONS

Any effort proposing to relate money and performance in higher education is to be undertaken with considerable care and a lot of humility. Evidence of the importance of the issue, and its complexity, may be seen by browsing through current literature. A sampling of perspectives is as follows.

> . . . Higher education should undertake internally the constructive actions necessary to get more effective use of resources and not wait for less constructive--and sometimes destructive--actions to be required because of external initiative.[1]
>
> ____Carnegie Commission on Higher Education, The More Effective Use of Resources: An Imperative for Higher Education

> The practical consequence emerging from the economic analysis of advanced education in recent years is the impression that we cannot afford it and should not have to pay for it unless the results can be added up in hard economic gains. It is a narrow, questionable, and potentially dangerous nation. In effect, we find ourselves selling out to one system of judging value largely because it can be quantified in dollars while other indices of judgment about higher education are forced out of the conversation.[2]
>
> ____Howard Howe II, Ford Foundation Executive and former U. S. Commissioner of Education

> Nevertheless, governors, legislators, taxpayers, and many new students are asking "what are we getting for our investment?" So we tell them how many students graduate or drop out, what the faculty teaching load is and the cost per credit hour, and who gets what kind of jobs. By accepting the validity of the question and trying to answer it in productivity terms we reinforce the productivity concept of what higher education is all about. Perhaps we ourselves should be asking different questions and trying to answer them in different terms.[3]
>
> ____C. Robert Pace, Professor, University of California at Los Angeles

Government officials at all levels are inclined to believe that the planning and forms of accountability in higher education are too often unrealistic, unconcerned with the needs of the larger society, and not representative of the position in which institutions find themselves. Institutions, both individually and within associations, should work to improve the measures by which they would want public agencies to judge institutional performance.[4]

_____The Carnegie Foundation for the Advancement of Teaching, More than Survival: Prospects for Higher Education in a Period of Uncertainty

The new regime in higher education is one of review procedures, regulation, litigation, and demands for information. Together these now account for so much of the energies and attention of college and university officials that the whole House of Intellect could soon be buried in an avalanche of paper. . . .The issue now is not whether higher education needs to be made accountable, but whether the accountability movement itself can be made accountable.[5]

_____Earl F. Cheit, Dean of Business Administration, University of California at Berkeley and former senior research fellow of the Carnegie Council on Policy Studies

The review of the literature from which these selections were taken and the planning activities of this last year have produced a set of assumptions important to the project. Concisely stated, the key assumptions are these. We face a dilemma of arrogance versus imprecision. To admit that we annually spend millions of dollars on higher education and yet not identify any measure of performance effectiveness seems a questionable position. To say that existing measures of performance are imperfect ignores the fact that decision allocation may be improved even with imperfect measures. And to continue debates on the limitations of performance measures may be less productive of new understandings than some pilot actions. The outline of assumptions is more completely stated as follows:

(1) That conventional notions of academic program quality and effectiveness have been based on measures that are input and process dominated. . .

Student Faculty Ratio
Percentage of Faculty with Doctorate
Average Faculty Salary
Number of Library Volumes
Expenditure per FTE Student
Average Aptitude of Entering Students

While these measures and indices are of value in describing possible quality of the educational environment, they do not tell us much about outcomes of the educational effort in terms of student growth and development, research, and public service.

(2) That there is both professional incentive and external interest for more serious effort in the area of instructional effectiveness, i.e., knowing not only how much we are doing (credit hours and degrees) but how good we are doing (changes in student knowledge, personal and social development, career development).

(3) That reasonably objective performance measures either are available or can be developed to permit some assessment of performance, and that even though some measures can be considered imperfect and primitive, they offer the possibility of learning more about impact of our effort than asking no questions at all.

(4) That the philosophical and technical difficulties associated with using such imperfect measures have thus far precluded a serious breakthrough in performance appraisal in higher education. Among the more frequent criticisms are these:

(a) Any operational definition of quality of effectiveness requires first a set of goals and objectives against which performance may be measured and evaluated. Assessment of quality must therefore relate to institutional mission. It is entirely possible for a community college to have a character of excellence quite different from its comprehensive university neighbor--and yet appropriate for the state to honor both kinds of excellence.

(b) Second, the assessment of quality and effectiveness requires a methodology not currently well developed. Evaluation is not the same as research. Evaluation implies values, judgments, and decisions on the "goodness" or "worth" of a given performance.

(c) Third, consensus on standards of evaluation is difficult to obtain. A criterion of performance that is broadly comprehensive and acceptable may turn out to be trivial or the least important expression of quality.

(d) Fourth, not all variables contributing to the quality of performance are under institutional control. For example, student employment success is a function not only of the program but of the market. Student motivation and performance are dependent not only on the educational environment but on the social environment as well.

(e) Fifth, while some indicators of program quality and effectiveness have attractive face validity (e.g., licensing examinations), the possibility of external manipulation of even these criteria does exist so that a larger or smaller number of persons are admitted to practice in a given field. In addition, not all students preparing for a given professional field (e.g., law) will choose to practice in that field.

(f) Sixth, narrow definitions of effectiveness may cause perversions in basic educational processes. If the criterion of effectiveness turns out to be some standardized performance examination, and money is tied to performance, then faculty may be encouraged to focus on this output to the exclusion of other worthwhile educational goals. The educational process may turn out to be very efficient in accomplishing unworthy or narrowly conceived goals.

(g) Seventh, there is a tendency to believe that what can be measured is what is important. This inclination ignores the fact that many activities in higher education--widely accepted as being good and desirable--may evade quantification and translation into an 80 column punch card. Further, some of the more critical outputs of higher education are long-range ones.

(h) Eighth, there is the widespread fear of the misuse of data by those not familiar with its limitations. If data on activity such as credit hours and unit costs can be used in uninformed ways, how much more susceptible to such misinterpretation and misuse would be data on effectiveness and performance.

(5) That these criticisms leave higher education with the choice of "no measures" of performance versus "imperfect measures." To expend millions of dollars on higher education and say that we have "no measures" of performance is a risky position to take. Even imperfect measures, wisely chosen, may operationally improve the allocation process.

(6) That further progress in the development of performance measures and educational performance appraisal is not likely to emerge from continued rehearsal of the aforementioned difficulties. Understanding and progress may have to come from harnessing deliberation to "doing."

(7) That the presence of a a financial incentive may serve to mobilize the imagination and intelligence of the Tennessee higher education community in attempting pilot projects in the area of performance appraisal and funding.

(8) And that the experience of such pilot projects may provide useful understandings about the potential for allocating state funds on a performance criterion and the impact of such allocation in promoting and rewarding improvements in performance.

Summary. Hopefully, some of the complexities and boundary assumptions of the Performance Funding Project may now be clearer. If we had a project motto, it would be "acting on the possible while awaiting perfection." The major conviction underlying the project is that further understanding of the nature of higher education effectiveness is more probable when deliberation is complemented by

action, when reserve is prudently tensioned with risk. In this complementary tension of deliberation and action, we hope to avoid a preoccupation with the impedimenta of evaluation and funding and to avoid a neglect of our most fundamental obligations--the growth of our students; the conservation, advancement, and application of knowledge.

A POSTSCRIPT ON POLICY AND INTENT AND IMPACT

Any review of public policy interventions, within higher education and out, will quickly reveal that policy intent is not always the same as policy impact. For higher education, it is difficult to conceive of a development effort with two more controversial and complex policy themes--evaluation and fiscal allocation. While we may observe that great risks always accompany great opportunities, it may also be good to close this discussion by considering the probabilities for success.

Certainly anyone who has examined the graveyard of attempted changes in higher education would not be overwhelmed with optimism about the potential for this project. If we have any cause for hope, that would have to be anchored on three ideas. First, the purpose of the project relates not so much to innovation in educational process as it does to the assessment of results. Thus, the challenge of the project is to fasten on educational effectiveness, regardless of whether the delivery processes might be described as conventional or innovative. Second, the project provides an incentive for action on this front by relating performance to funding. Finally, we are inclined to agree with Bob Berdahl who

suggested "that in a time of fiscal austerity a little bit of loose money can probably have a disproportionate effect in bringing on altered behavior. When things are tight a bit of green can be a great incentive."[6]

This latter point is of signal interest, because it may be that the incentive and fiscal processes of higher education are themselves prominent obstacles to change. For example, the Carnegie Commission Report on More Effective Use of Resources pointed out that:

> One obstacle to the achievement of effective use of resources in higher education is the fact that compensation and budgetary procedures are not structured in such a way as to induce change. In private industry, innovations that achieve savings in production costs tend to improve the firm's competitive position and to increase profits, which, under profit-sharing schemes, will benefit the firm's executives. No such mechanism exists in higher education or in most non-profit organizations. In fact, budgetary procedures tend to discourage innovations to save costs.[7]

In his massive volume on management, Peter Drucker described the same theme in this way.

> . . . Results in the budget-based institution mean a larger budget. Performance is the ability to maintain or increase one's budget. Results, as the term is commonly understood, that is, contribution to the market or achievement toward goals and objectives, are in effect, secondary. The first test of a budget-based institution and the first requirement for its survival is to obtain the budget. And the budget is not, by definition, related to contribution but to good intentions.[8]

Experienced collegiate administrators know that appropriations and budgeting processes have essentially political features, that there is a set of informal rules and practices, that these informal practices are often as powerful as the more objective formulae which we use to build budgetary requests. The recent report on Financing Postsecondary Education in the United States indicates that:

> In nearly every state in which there is a statewide coordinating agency, there has been an effort to establish unit cost measures as basic budgeting building devices, primarily to narrow the scope of negotiations with the individual campuses and to gain some rough equity in the support of comparable institutions. It is true, however, that these budget devices are frequently ignored during the appropriations process, when budgets are adjusted to reflect the actual amount that the legislatures can or will appropriate.[9]

Whatever the intricacies and sophistication of current appropriations and budgeting procedures, the experienced administrator knows, as suggested by Wildavsky, that "The largest determining factor of the size and content of this year's budget is last year's budget."[10] Thus, any developmental effort proposing to deal with the inertia and complexity of fiscal processes is one to be undertaken with humility and caution--but not with undue timidity.

Higher education is an adventure in the development and application of ideas. What we hold as an ideal before society we should be willing to model within the community. Ideally, no external incentive should be required for a serious attempt in evaluating the effectiveness of our efforts and in reforming our incentive structures. And we may take it as a happy coincidence that this is a time when internal responsibility is reinforced by interest among those providing higher education support.

The history of achievement in any endeavor is written by individuals, and communities, setting and achieving goals that companions and critics, often the same, say should not be attempted or cannot be achieved. The Performance Funding Project provides a leadership opportunity for the Tennessee higher education community on the issue of both measuring and rewarding performance. Hopefully, the record of project achievement will reveal the philosophical

wisdom of its goal and the practical wisdom of involvement and execution processes chosen to pursue that goal.

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